

Appl. No. 10/603,278
Docket No. 9285L
Amdt. dated 7/21/06
Reply to Office Action mailed on 3/27/06
Customer No. 27752

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A method for reducing the level of acrylamide in roasted cocoa beans, comprising reducing the level of asparagine in cocoa beans by adding an asparagine-reducing enzyme to the cocoa beans.
2. (Cancelled)
3. (Previously Presented) The method of claim 1, wherein said asparagine-reducing enzyme is asparaginase.
4. (Previously Presented) The method of claim 1, wherein said asparagine-reducing enzyme is an enzyme capable of hydrolyzing the amide group of free asparagine.
5. (Currently Amended) A product comprising treated roasted cocoa beans, wherein the level of acrylamide in said product is reduced by at least about 10% when compared to conventionally processed cocoa beans as a control sample, wherein the control sample is prepared in exactly the same manner as the enzyme-treated sample, with the exception that enzyme is not added.
6. (Currently Amended) The product of claim 5, wherein the level of acrylamide in said product is reduced by at least about 30% when compared to conventionally processed cocoa beans as a control sample, wherein the control sample is prepared in exactly the same manner as the enzyme-treated sample, with the exception that enzyme is not added.
7. (Currently Amended) The product of claim 6, wherein the level of acrylamide in said product is reduced by at least about 50% when compared to conventionally processed cocoa beans as a control sample, wherein the control sample is prepared in exactly the same manner as the enzyme-treated sample, with the exception that enzyme is not added.

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8. (Currently Amended) The product of claim 7, wherein the level of acrylamide in said product is reduced by at least about 70% when compared to conventionally processed cocoa beans as a control sample, wherein the control sample is prepared in exactly the same manner as the enzyme-treated sample, with the exception that enzyme is not added.
9. (Currently Amended) The product of claim 8, wherein the level of acrylamide in said product is reduced by at least about 90% when compared to conventionally processed cocoa beans as a control sample, wherein the control sample is prepared in exactly the same manner as the enzyme-treated sample, with the exception that enzyme is not added.
10. (Original) The product of claim 5, wherein said product is cocoa powder.
11. (Original) The product of claim 5, wherein said product is chocolate candy.
12. (Original) The product of claim 5, wherein said product is a candy bar.
13. (Original) The product of claim 5, wherein said product is a cocoa beverage.
14. (Original) A dark cocoa powder comprising less than about 350 ppb acrylamide.
15. (Original) The powder of claim 14, comprising less than about 250 ppb acrylamide.
16. (Original) The powder of claim 15, comprising less than about 100 ppb acrylamide.
17. (Currently Amended) An article of commerce comprising:
 - (a) a product comprising treated roasted cocoa beans, wherein said roasted cocoa beans have a reduced level of acrylamide when compared to conventionally processed cocoa beans as a control sample, wherein the control sample is prepared in exactly the same manner as the enzyme-treated sample, with the exception that enzyme is not added;
 - (b) a container for containing the product; and
 - (c) a message associated with the container,

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wherein said message associated with the container informs the consumer that the product has a reduced level of acrylamide.

18. (Original) The article of claim 17, wherein said message informs the consumer that the product is low in acrylamide.
19. (New) A method for reducing the level of acrylamide in cocoa beans which comprise soluble materials and asparagine using an asparaginase-reducing enzyme, said method comprising the step of extracting at least a portion of asparagine from said cocoa beans to form an extract, contacting said extract with said enzyme for a sufficient amount of time to reduce the level of asparagine at least about 10%, as compared with a control sample prepared in exactly the same manner as the enzyme-treated sample with the exception that said enzyme is not added, and adding back at least a portion of said extract comprising said soluble materials to at least a portion of said cocoa beans, followed by roasting said beans.
20. (New) A method according to Claim 19 which employs a dominant bath comprising said enzyme, whereby soluble materials in said beans, with the exception of said asparagine, do not continue to extract out of said beans, once equilibrium has been reached.
21. (New) A method according to Claim 19, wherein said cocoa beans are winnowed to form nibs prior to extraction and contact with said enzyme.
22. (New) A method according to Claim 20, wherein said beans are winnowed to form nibs prior to contact with said enzyme-containing dominant bath.